

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of

Allocation of Spectrum Below 5 GHz Transferred  
from Federal Governmental Use

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)  
) ET Docket No. 94-32  
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**FURTHER COMMENTS**

THE WIRELESS CABLE ASSOCIATION  
INTERNATIONAL, INC.

Paul J. Sinderbrand  
William W. Huber

Sinderbrand & Alexander  
888 Sixteenth Street, N.W.  
Fifth Floor  
Washington, D.C. 20006-4103  
(202) 835-8292

Its Attorneys

March 20, 1995

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## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	ii
I. THE COMMISSION SHOULD ADOPT A GENERAL WIRELESS COMMUNICATIONS SERVICE IN THE 4660-4685 MHZ BAND. ....	1
II. THE RULES GOVERNING THE 4660-4685 MHZ BAND MUST BE HOSPITABLE TO THE PROVISION OF INNOVATIVE NEW SERVICES. ....	5
A. The Commission Should Channelize The 4660-4685 MHz Band Into 5 MHz Segments, Limit Licensees To Two Segments Per Licensing Area, and Establish a 10 MHz Entrepreneurs' Block. ....	5
B. The Proposed Use of MTAs As Licensing Areas Should Be Abandoned In Favor Of Smaller Licensing Areas. ....	7
C. The Commission Should Adopt A Definition of "Small Business" That Is Reasonable Under The Circumstances. ....	9
III. CONCLUSION. ....	11

## **EXECUTIVE SUMMARY**

The Wireless Cable Association International, Inc. ("WCAI") applauds the Commission's proposal to allocate spectrum in the 4660-4685 MHz band for innovative new wireless communications services. In WCAI's view, this allocation will offer entrepreneurs the greatest possible incentive and opportunity to develop and introduce innovative service offerings based on emerging new technologies. Wireless cable operators believe that interactive video applications may be one of these offerings, and would allow wireless cable to remain competitive with the wired cable monopoly. The creation of a General Wireless Communications Service in the 4660-4685 MHz band with an open, flexible service definition is the most effective approach for achieving the Commission's goals of universality, rapid deployment of new technologies, diversity of services and competitive delivery.

The Commission must take care to craft a regulatory environment that is hospitable to entrepreneurs attempting to provide innovative new services to the public. In this vein, it is critical that the Commission employ a channelization plan for the 4660-4685 MHz band, limit the geographic scope of licensing areas and adopt an appropriate definition of "small business." By establishing a General Wireless Communications Service, subject to the proposals advanced herein, the Commission will foster healthy competition in communications services and will achieve the greatest benefit for the American public.

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**FURTHER COMMENTS**

The Wireless Cable Association International, Inc. ("WCAI"), by its attorneys and pursuant to Sections 1.415 and 1.419 of the Commission's Rules, hereby submits its comments in response to the *First Report and Order and Second Notice of Proposed Rule Making* ("First Report and Second Notice") in this proceeding.<sup>1/</sup>

**I. THE COMMISSION SHOULD ADOPT A GENERAL WIRELESS COMMUNICATIONS SERVICE IN THE 4660-4685 MHZ BAND.**

At the outset, the Commission is to be applauded for its decision to adopt a Fixed and Mobile allocation in the 4660-4685 MHz band. As the *First Report and Second Notice* properly concludes, "the public will receive the greatest benefit by allocating the 4660-4685 MHz band to the Fixed and Mobile services, regardless of whether the ultimate use of this spectrum is for private services, non-subscriber services, or subscriber-based services."<sup>2/</sup> In WCAI's view, such an allocation will offer the greatest possible incentive and opportunity to develop and introduce innovative service offerings based on emerging new technologies.

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<sup>1/</sup>*Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use*, FCC 95-47, ET Docket No. 94-32 (rel. Feb. 17, 1995)[hereinafter cited as "*First Report and Second Notice*"].

<sup>2/</sup>*Id.* at ¶ 42.

As WCAI explained in detail in its initial comments in this proceeding, its interest stems from the fact that the 4660-4685 MHz band may provide a source of much-needed spectrum for the wireless cable industry.<sup>3/</sup> The Commission has already recognized that wireless cable operators face a severe shortage of channel capacity when compared to their coaxial cable and Direct Broadcast Satellite ("DBS") competition.<sup>4/</sup> Although cost factors make it impractical to utilize the 4660-4685 MHz band for the point-to-multipoint transmission of video programming to wireless cable subscribers, in the future the 4660-4685 MHz band could be employed by wireless cable system operators to provide the return paths that emerging interactive applications will demand.

It is essential to the future viability of wireless cable that operators have access to additional spectrum that supports interactive services.<sup>5/</sup> The communications trade press is brimming with reports on the efforts of coaxial cable system operators and telephone

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<sup>3/</sup>See Comments of Wireless Cable Ass'n Int'l, ET Docket No. 94-32, at 2 (filed Dec. 19, 1994)[hereinafter cited as "WCAI Comments"].

<sup>4/</sup>See *Amendment of Part 74 of the Commission's Rules Governing Use of the Frequencies in the Instructional Television Fixed Service*, 9 FCC Rcd 3360, 3364 (1994); *Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service*, FCC 94-293, MM Docket No. 94-131 and PP Docket No. 93-523, at ¶ 2 (rel. Dec. 1, 1994)[hereinafter cited as "*MDS Auction NPRM*"].

<sup>5/</sup>While the Commission has allocated a small quantity of spectrum at 2686-2690 MHz for use by wireless cable operators as return paths, it has proven technologically difficult to employ that spectrum because it is directly adjacent to a channel used for the transmission of programming to consumers.

companies to offer interactive video applications to consumers.<sup>6/</sup> Major program suppliers are already looking to the wireless cable industry as a potential distributor of interactive video programming.<sup>7/</sup> If the wireless cable industry is denied access to the spectrum needed to provide interactivity, wireless cable will find itself unable to provide effective competition to the cable monopoly. In a recent speech to the Annual Legislative Conference of the National Association of Counties, Chairman Hundt correctly noted that: "Government isn't going to build the information highway to every house. Competition will do so."<sup>8/</sup> If wireless cable is to be a competitive service provider, however, it must be able to provide the interactive services consumers will demand of their on and off ramps to the information superhighway.

For this reason, WCAI supports the Commission's proposal to establish a General Wireless Communications Service in the 4660-4685 MHz band.<sup>9/</sup> While such an allocation would not permit all possible service offerings,<sup>10/</sup> it will accomplish the objective of this

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<sup>6/</sup>See, e.g. "FSN Testbed Unveiled: Levin Calls Orlando 'Turning Point' for Telecommunications," *Communications Daily*, at 2-3 (Dec. 15, 1994).

<sup>7/</sup>See Weinschenk, "Court TV Sets Alternative Distribution Unit," *Cable World*, at 84 (Dec. 5, 1994)[*"Court TV's new broadband distribution division that will seek new ways to distribute the service's fare could be the perfect early vehicle for interactive programming, sources say. . . . Target technologies include . . . MMDS/wireless telephony."*]

<sup>8/</sup>Speech by Reed E. Hundt before the Annual Legislative Conference of the National Ass'n of Counties, Washington, DC, at 4 (March 5, 1995).

<sup>9/</sup>See *First Report and Second Notice*, at ¶ 60.

<sup>10/</sup>The Commission has proposed to exclude broadcast services, radiolocation services and satellite services from the allocation. See *First Report and Second Notice*, at ¶ 60. WCAI believes those proposed exclusions are appropriate.

proceeding -- to promote "new and enhanced services [that] will create new jobs, foster economic growth and improve access to communications by industry and the American public."<sup>11/</sup> In its initial comments, WCAI refrained from seeking a set aside of spectrum in the 4660-4685 MHz band for the exclusive use of wireless cable operators. Rather, WCAI merely asked the Commission to assure that wireless cable operators have a fair opportunity to bid for and productively use some portion of that spectrum.<sup>12/</sup> Thus, WCAI applauds the Commission for suggesting in the *First Report and Second Notice* a regulatory scheme that maximizes the flexibility that licensees will be afforded in tailoring their service offerings.<sup>13/</sup>

To achieve that goal, the Commission should adopt rules governing the 4660-4685 MHz band that generally permit the licensee complete flexibility to use the spectrum as it sees fit within its geographic area, subject only to compliance with interference protection requirements. Just as it did for Personal Communications Services ("PCS"), an open, flexible service definition for these bands "will provide the most effective approach for meeting [the]

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<sup>11/</sup>*Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use*, 9 FCC Rcd 6779 (1994)[hereinafter cited as "NPRM"].

<sup>12/</sup>See WCAI Comments, at 2-3.

<sup>13/</sup>In the *First Report and Second Notice*, the Commission has afforded those that support the establishment of specific service categories an opportunity to demonstrate that such an approach will better service the Commission's objectives. See *First Report and Second Notice*, at ¶ 63. WCAI does not believe that allocations of specific portions of the 4660-4685 MHz band for individual services will serve the public interest. However, should the Commission reverse course and allocate specific portions of the band for individual services, it must make certain that wireless cable operators have access to 15 MHz for the provision of interactive services. Such an individual allocation will assure that wireless cable operators will be able to provide consumers with the interactive service offerings they will come in the future to expect from their video programming providers.

four objectives of universality, speed of deployment, diversity of services and competitive delivery.”<sup>14/</sup>

## **II. THE RULES GOVERNING THE 4660-4685 MHz BAND MUST BE HOSPITABLE TO THE PROVISION OF INNOVATIVE NEW SERVICES.**

Three regulatory issues that are critical to achieving those objectives are the channelization plan for the 4660-4685 MHz band, the geographic scope of the license area and the bidding system employed for licensing the band. The Commission must make certain that the regulatory environment is hospitable to entrepreneurs attempting to bring innovative new services to the American public.

*A. The Commission Should Channelize The 4660-4685 MHz Band Into 5 MHz Segments, Limit Licensees To Two Segments Per Licensing Area, and Establish a 10 MHz Entrepreneurs' Block.*

In its initial comments, WCAI urged the Commission to adopt a flexible channelization plan with a sufficient number of relatively small channels to accommodate a variety of needs.<sup>15/</sup> Thus, WCAI that does not object to the proposal advanced in the *First Report and Second Notice* to channelize the band into five channels of 5 MHz each and to permit a licensee to accumulate multiple channels if more than 5 MHz is required.<sup>16/</sup> Since wireless cable operators will need in the neighborhood of 10 MHz in order to accommodate their

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<sup>14/</sup>*Amendment of the Commission's Rules to Establish New Personal Communications Services*, 8 FCC Rcd 7700, 7712 (1993)[hereinafter cited as “*PCS Second Report and Order*”].

<sup>15/</sup>*See WCAI Comments*, at 5-6.

<sup>16/</sup>*See PCS Second Report and Order*, 8 FCC Rcd at 7726-29; *PCS Reconsideration Order*, 9 FCC Rcd at 4980-82.



interactive service needs, adoption of the Commission's proposal will result in a regulatory environment that meets wireless' needs, as well as the spectrum needs of others.

However, WCAI urges the Commission to limit each licensee to no more than two channels within any given license area, rather than the three proposed in the *First Report and Second Notice*.<sup>17/</sup> Adoption of this proposal will promote efficient spectrum utilization. In addition, it will assure that there are at least three service providers in the 4660-4685 MHz band, rather than just the two providers that could result under the Commission's proposal. To achieve the Commission's objective in this proceeding promoting the emergence of innovative new services, the Commission should strive to must provide the greatest diversity of entities with access to the 4660-4685 MHz band -- a result best achieved by limiting the amount of spectrum any one entity can control in a license area.

Moreover, the Commission should set aside two 5 MHz channels as an "entrepreneurs' block." As the *First Report and Second Notice* correctly notes, there is cause for concern that no matter what rules are designed to promote the interests of smaller entities, large firms with significant financial resources will dominate auctions for the 4660-4685 MHz band.<sup>18/</sup> Just as the Commission found that "small entities stand little chance of acquiring licenses in these broadband [PCS] auctions if required to bid against existing large companies, particularly large telephone, cellular, and cable television companies," so too will they be disadvantaged

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<sup>17/</sup>See *First Report and Second Notice*, at ¶¶ 77-78.

<sup>18/</sup>See *id.*, at ¶ 118.

here.<sup>19/</sup> Because many of the services contemplated for the 4660-4685 MHz band will require more than 5 MHz,<sup>20/</sup> the Commission should set aside two 5 MHz channels as an entrepreneurs' block and open those channels only to entities meeting the financial caps on the assets and gross revenues that were established for PCS.<sup>21/</sup> Because at least some of the services that may be offered over the 4660-4685 MHz band will be PCS-like in nature and require capital expenditures on the same order as PCS, use of the same eligibility requirements is appropriate.

*B. The Proposed Use of MTAs As Licensing Areas Should Be Abandoned In Favor Of Smaller Licensing Areas.*

In order to maximize flexibility, the Commission should issue licenses for relatively small geographic areas while permitting bidders to aggregate adjacent territories. The Commission is quite right when it states in the *First Report and Second Notice* that "because we have adapted an allocation that allows for use of the spectrum by any Fixed or Mobile Service, we cannot determine the most appropriate size of the service area based on the type of service to be offered."<sup>22/</sup> In light of that acknowledgement, WCAI finds inexplicable the

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<sup>19/</sup>*Implementation of Section 309(j) of the Communications Act - Competitive Bidding*, 9 FCC Rcd 5532, 5585 (1994)[hereinafter cited as "*Auction Fifth Report and Order*"].

<sup>20/</sup>In addition, allocating 40% of the channels to an entrepreneurs' block would be consistent with the precedent set with PCS, where the Commission sought to "ensure that 'entrepreneurial' businesses are granted nearly half of all the broadband PCS licenses being auctioned." *Id.*

<sup>21/</sup>*Id.*

<sup>22/</sup>*First Report and Second Notice*, at ¶ 79.

Commission's proposal to utilize the 51 Major Trading Areas ("MTAs") for licensing the 4660-4685 MHz band.

In its initial comments, WCAI suggested that licenses for the band be awarded based on cellular Metropolitan Statistical Areas ("MSAs") and Rural Service Areas ("RSAs").<sup>23/</sup> Since the *First Report and Second Notice* evidences a preference for the use of Rand-McNally & Co. area designations, WCAI would not object to the use of Basic Trading Areas ("BTAs") for the issuance of licenses. BTAs or MSA/RSAs would appear to be the smallest practical geographic areas for use in connection with licensing. Yet, adjacent BTAs or MSA/RSAs could be combined by those service providers who demand a more regional scope.<sup>24/</sup> Again, this would yield efficient spectrum utilization. Local service providers could secure authorization for just a single BTA or MSA/RSA, while those service providers operating on a broader geographic scope could accumulate licenses for multiple BTAs or MSA/RSAs.

The Commission's proposal to permit MTA licensees to partition their service area hardly achieves the same result. Before an MTA can be partitioned, it must be acquired at auction. Simply put, it is asking too much of an entity that contemplates providing a local

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<sup>23/</sup>See *WCAI Comments*, at 6.

<sup>24/</sup>See *PCS Second Report and Order*, 8 FCC Rcd at 7734. Certainly, MSA/RSAs are not too small for use in the licensing of this spectrum. Indeed, earlier this month the Commission proposed to adopt an MSA/RSA-based system for issuing licenses for new MDS stations. See *MDS Auction NPRM*, at ¶¶ 6-7. Admittedly, WCAI has concerns regarding the implementation of an MSA/RSA-based system for MDS licensing after hundreds of licenses have already been issued using a different system. However, as the Commission's proposal for the licensing of MDS demonstrates, the use of MSA/RSAs is an appropriate basis for licensing spectrum that will be employed by local service providers.

service to expect it to make the financial commitment necessary to acquire an MTA, even if that entity can then recoup part of its costs through partitioning. It is more reasonable to provide for smaller licensing areas, while affording those that desire to serve larger areas the opportunity to accumulate contiguous areas.

*C. The Commission Should Adopt A Definition of "Small Business" That Is Reasonable Under The Circumstances.*

In authorizing the Commission to employ competitive bidding procedures to select from among mutually exclusive applicants, Congress mandated that the Commission "ensure that small businesses . . . are given the opportunity to participate in the provision of spectrum-based services, and, for such purposes, consider the use of tax certificates, bidding preferences, and other procedures . . ."<sup>25/</sup> WCAI believes that Congress' objectives can best be served with respect to the 4660-4685 MHz band by permitting installment payments by small businesses in the same manner as the Commission did for PCS.<sup>26/</sup> Strict attribution rules should be promulgated to ensure that designated entities remain in clear control of licenses subject to installment payments, while still retaining the ability to attract passive investment. The attribution rules drafted for broadband PCS provide an excellent model and should be employed by the Commission for the 4660-4685 MHz band.

The Commission has solicited comment on whether the standard definition of "small business" utilized by the Small Business Administration ("SBA") is appropriate here or

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<sup>25/</sup>47 U.S.C. § 309(j)(4)(D).

<sup>26/</sup>See *Auction Fifth Report and Order*, 9 FCC Rcd at 5591-94.

whether the Commission should do as it did for broadband and narrowband PCS and award designated entity status to any business with average gross revenues for the three years proceeding the auction of \$40 million or less.<sup>27/</sup> WCAI submits that the approach adopted by the Commission for PCS is appropriate here.

The Commission has consistently acknowledged that the SBA's small business definition is inappropriate for use in capital intensive industries.<sup>28/</sup> The Commission has recognized that the SBA standard "is overly restrictive because it would exclude most businesses possessing the financial resources to compete successfully in the provision [of capital intensive services]." Thus, the costs of system construction have been the determining factor in establishing the small business definition for each service.

The Commission's approach to defining "small business" for narrowband and broadband PCS strongly suggests that the Commission define "small business" for purposes of the General Wireless Communications Service as any business with average gross revenues for the three years proceeding the auction of \$40 million or less.<sup>29/</sup> The Commission has estimated that the cost to construct a narrowband PCS system can be as low as approximately

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<sup>27/</sup>See *First Report and Second Notice*, at ¶ 114.

<sup>28/</sup>See *Implementation of Section 309(j) of the Communications Act - Competitive Bidding*, 9 FCC Rcd 2348, 2395-96 (1994); *Implementation of Section 309(j) of the Communications Act - Competitive Bidding Narrowband PCS and Amendment of the Commission's Rules to Establish New Narrowband Personal Communications Services*, FCC 94-219, PP Docket No. 93-253 at ¶ 42-46 (rel. Aug. 17, 1994)[hereinafter cited as "*Auction Third Memorandum Opinion and Order*"]; *Auction Fifth Report and Order*, 9 FCC Rcd at 5606-08.

<sup>29/</sup>See *Auction Third Memorandum Opinion and Order*, at ¶ 46; *Auction Fifth Report and Order*, 9 FCC Rcd at 5608-09.

\$50,000 for a Basic Trading Area system.<sup>30/</sup> Construction costs for a narrowband Major Trading Area system are estimated to be \$100,00 to meet the minimum population requirements and \$1.25 million to eventually meet the minimum geographical requirements.<sup>31/</sup> Based on these cost estimates, the Commission has found that a \$40 million gross revenues benchmark will avoid excluding most businesses possessing the financial resources to compete successfully in the provision of narrowband and broadband PCS services.<sup>32/</sup>

Because of the variety of services likely to be offered at 4660-4685, it is impossible to determine the capital requirements for each service. Yet, it is safe to say that the capital requirements for some of those services will be in excess of those for narrowband PCS. Thus, the capital requirements under the SBA's definition would exclude those companies with the financial wherewithal to actually construct and operate 4660-4685 MHz systems. Therefore, adoption of a \$40 million gross revenues standard is more appropriate under these circumstances.

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<sup>30/</sup>*Implementation of Section 309(j) of the Communications Act - Competitive Bidding*, 9 FCC Rcd 2941, 2969 n. 40 (1994).

<sup>31/</sup>*Id.*

<sup>32/</sup>*See Auction Third Memorandum Opinion and Order*, at ¶¶ 44-46; *Auction Fifth Report and Order*, 9 FCC Rcd at 5600.

### III. CONCLUSION.

WHEREFORE, for the foregoing reasons, WCAI urges the Commission to adopt the proposals advanced in the *First Order and Second Notice*, subject to the proposals advanced above to assure that the 4660-4685 MHz band is available for entrepreneurs to introduce innovative new services.

Respectfully submitted,

WIRELESS CABLE ASSOCIATION  
INTERNATIONAL, INC.

By: 

Paul J. Sinderbrand  
William W. Huber

Sinderbrand & Alexander  
888 Sixteenth Street, N.W.  
Fifth Floor  
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